

## **REMARKS/ARGUMENTS**

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

### **I. STATUS OF THE CLAIMS AND FORMAL MATTERS**

Claims 1-26 are currently pending. Claims 1, 18, 21, and 24 are independent. Claims 1, 12, 14, 18, 21, and 24-26 and are hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

### **II. OBJECTIONS TO THE SPECIFICATION**

**A.** The Office Action objected to the specification as allegedly not providing antecedent basis for term “a tangible storage medium” recited in claims 24-26.

Without conceding the rightfulness of the objection, Applicants have amended claims 24-26 to no longer recite “a tangible storage medium” thus making moot this objection.

**B.** The Office Action objected to the specification (page 5) as having the application numbers and filing dates left blank.

Applicants have amended the specification as described herein above to overcome this objection.

### **III. CLAIM OBJECTIONS**

The Office Action objected to claim 12 because of informalities.

The dependency of claim 12 has been amended to overcome this objection.

### **IV. REJECTIONS UNDER 35 U.S.C. §101**

A. Claims 24-26 were rejected as allegedly directed to non-statutory subject matter.

Claims 24-26 have been amended to overcome the rejection. As discussed above, claims 24-26 have been amended to no longer recite, “a tangible storage medium.”

For example, claim 24 has been amended to recite, *inter alia*:

“A computer program product, comprising a computer usable medium having a computer-readable program embodied therein, said computer readable program adapted to be executed to implement a peer system in a peer-to-peer relay network, the method comprising:”

*See, for example, Publ App. par. [0173].*

The Board of Patent Appeals and Interferences (BPAI) has ruled in the matter of *Ex Parte Bo Li* (BPAI 2008-1213, November 6, 2008). In *Ex Parte Bo Li* the above exact wording (with minor contextual changes) was found to be allowable under §101.

Applicants respectfully request withdrawal of the §101 rejection of claims 24-26.

**B.** Claims 1-15, 17, and 21-23 were rejected as allegedly directed to non-statutory subject matter.

Applicants respectfully traverse this rejection for at least three (3) reasons:

**First Argument**

Independent claim 1 has been amended to make clear that which was inherent. Claim 1 clarifies that a peer system “include[s] at least one processor.”

Claim 1 now undeniably recites a physical article to constitute a machine within the meaning 35 U.S.C. §101.

Claims 2-15, and 17 depend from claim 1 are believed statutory for at least same reason as claim 1.

**Second Argument**

Claims 1-15, and 17 already include physical articles.

First, it is well known that a peer system in a peer-to-peer (P2P) network is hardware, not software. That is, the “system” is, without a doubt, hardware and not a computer program.

Second, claim 1 recites, “each peer system in said first peer-to-peer relay **network** is **connected** to a number of other peer systems . . .” (emphasis added). Thus, claim 1 already recites a “network” and “connected.” Both are clearly physical items.

Applicants realize there may be software to drive the network and connections. However, Applicants contend the “network” itself is necessarily physical hardware and well-known to those in the art. Applicants also contend a “connection” is physical hardware whether the connection is wired or wireless. *See, for example*, MPEP 2106 (“If elements of an invention

are well known in the art, the applicant does not have to provide a disclosure that describes those elements.”)

Third Argument

Claims 21-23 were improperly rejected under 35 U.S.C. §101. Applicants respectfully request reconsideration.

Claims 21-23 are in “mean-plus-function” format under 35 U.S.C. §112, sixth paragraph. “Means-plus-function” claims are, by definition, hardware and get their structure from the specification. From **MPEP 2111.01**:

When an element is claimed using language falling under the scope of 35 U.S.C. 112, 6th paragraph (often broadly referred to as means or step plus function language), the specification must be consulted to determine **the structure, material, or acts** corresponding to the function recited in the claim. (emphasis added)

Also, **MPEP 2106**

Where means plus function language is used to define the characteristics of a machine or manufacture invention, such language must be interpreted to read on only the **structures or materials disclosed in the specification** and "equivalents thereof" that correspond to the recited function. (emphasis added)

Thus, claims 21-23 should not have been rejected under 35 U.S.C. §101 as claims in means-plus-function format have the structure and materials (and equivalents thereof) as described in the specification.

**V. REJECTIONS UNDER 35 U.S.C. §§102 AND 103**

Claims 18-26 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent Application Publication No. 2002/0184311 of Traversat et al. (hereinafter, merely “Traversat”);

Claims 1-7, and 9-17 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Traversat in view of U.S. Patent No. 6,487,600 to Lynch; and

Claim 8 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Traversat and Lynch in view of U.S. Patent No. 7,240,093 to Danieli et al. (hereinafter, merely “Danieli”)

Applicants respectfully traverse these rejections.

Independent claim 1 recites, *inter alia*:

a main peer-to-peer relay network including all peer systems in the multiple peer-to-peer relay networks

...  
a first peer-to-peer relay network . . . that are a first sub-network of the main peer-to-peer relay network

...  
a second peer-to-peer relay network . . . independent from the first sub-network, that are a second sub-network of the main peer-to-peer relay network

...  
wherein a message addressed from a peer in the first peer-to-peer relay network to another peer in the first peer-to-peer relay network is relayed only to peers in the first peer-to-peer relay network and is not relayed to a peer in the second peer-to-peer relay network, and

...  
wherein a message addressed from a peer in the first peer-to-peer relay network to a peer not in the first peer-to-peer relay network is relayed to all peers in the main peer-to-peer relay network.

As understood by the Applicants, Traversat describes, in relevant part, a P2P network wherein a peer can limit propagation of a message to a subset of the network. The message includes a scope field to indicate the peer subset for which the message is intended. However, there is no disclosure in Traversat that (1) the relaying peer belongs to a peer group that is a sub-network of a larger peer network, and (2) a message addressed to a peer within the sub-network cannot be relayed by a peer outside of network. That is, there is no disclosure in Traversat that a message originated by a peer in a sub-network and addressed to another peer within the sub-

network cannot be relayed through a peer not in the sub-network. However, a message addressed to a peer outside of the network is relayed to all peers in the larger network.

In contrast, in the invention as claimed in claim 1, a peer system can belong to multiple peer-to-peer (P2P or grid) relay networks. The members of a main P2P network can create sub-networks within the main P2P relay network. Each of the members of a sub-network is also a member of the larger main grid. For example, a P2P relay network includes all the players in a game as peer systems and each team (including sub-sets of the total players) has a sub-network of peer systems (e.g., for private communication in the game). In this way, the peers can establish a multi-channel environment for desirably distributing and receiving data. Because the message cannot be relayed through a peer not in the sub-network, the possibility of a message being intercepted by a peer in another sub-network is eliminated (or at least reduced).

All the peers in the environment are connected to a single main grid. The main grid is for general announcements and general services. Peers create, join, and create smaller independent sub-networks to access online services such as chat rooms or games. Peers can use the main grid to communicate before the sub-network grid has been established, such as when a new peer wants to join a grid. Because all the control messages can be broadcast through the main grid, every peer can independently maintain a list of available grids and a list of active peers in each grid. Publ. App. pars. [0117]-[0122] and FIG. 21

As recited in claim 1, recites, “a main peer-to-peer relay network . . . a first peer-to-peer relay network . . . that are a first sub-network of the main peer-to-peer relay network . . . a second peer-to-peer relay network . . . independent from the first sub-network, that are a second

sub-network of the main peer-to-peer relay network.” That is, in the present application recited in claim 1, there is a main P2P network having two P2P sub-networks that are independent of one another.

As distinguished from Traversat, claim 1 recites a restriction on propagation of a message through any of the P2P sub-networks by reciting, “wherein a message addressed from a peer in the first peer-to-peer relay network to another peer in the first peer-to-peer relay network is relayed only to peers in the first peer-to-peer relay network and is not relayed to a peer in the second peer-to-peer relay network, and wherein a message addressed from a peer in the first peer-to-peer relay network to a peer not in the first peer-to-peer relay network is relayed to all peers in the main peer-to-peer relay network.”

That is, as claimed in claim 1, a message received by a peer in the first sub-network is relayed in two different ways dependent on to which peer the message is addressed.

**(1) when the received message is addressed to a peer in the first sub-network the message is only relayed through peers in the first sub-network. Such a message is not relayed through any peer not in the first sub-network even when, for example, the path to the addressed peer would be shorter or quicker through a peer not in the first sub-network; and**

**(2) when the received message is addressed to a peer not in the first sub-network the message is relayed to all peers in the main (or parent) P2P network.**

In this way messages received in the first sub-network and addressed to a peer in the first sub-network are restricted from even being relayed, no less read, by a peer outside of the sub-

network. However, peers in the sub-network can send other messages to all peers in the main network as well.

The Office Action, at page 5, points to Traversat par. [0108] and FIGS. 20A-20D for the above-cited features of claim 1. However, at the cited location Traversat states:

“In one embodiment, the peer-to-peer platform may use the concept of a peer group as an implicit scope of all messages originated from within the group. In one embodiment, a scope may be realized with the formation of a corresponding peer group. For example, a peer in San Francisco looking to buy a used car is normally not interested in cars available outside of the Bay Area. In this case, the peer may want to multicast a message to a subset of the current worldwide peer group, and a subgroup may be formed especially for this purpose. In one embodiment, the multicast may be done without the formation of a new peer group. In one embodiment, all messages may carry a special scope field, which may indicate the scope for which the message is intended. Any peer who receives this message can propagate the message based on the scope indicator.

Thus, as understood, Traversat is describing P2P networks that are subdivided for purposes of restricting the scope of distribution of messages. The multicast message of Traversat is sent to a subset of the entire P2P network. However, Traversat is restricting the intended addressees, not how the messages are propagated those addressees. In Traversat, “any peer who receives this message can propagate the message based on the scope indicator.” *See, also,* Traversat FIGS. 20A-20D. That is, the message may well propagate through peers from whom the message is not intended so as to reach peers for whom the message is intended. The “not intended” peers are only relay points as in most P2P networks. This is distinguishable from the invention as claimed in claim 1, where message addressed to peers in the sub-network cannot be relayed through a peer that is not in the sub-network.

Lynch and Danieli do not add the elements missing from Traversat.

Claim 1 is believed patentable over Traversat, Lynch, and Danieli because those references taken alone or in combination do not teach, suggest, or disclose each and every element recited in the claim.

For reasons similar or somewhat similar to those described above with regard to independent claim 18, independent claims 24 and 26 are also believed to be patentable.

## VI. DEPENDENT CLAIMS

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

## CONCLUSION

Claims 1-26 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

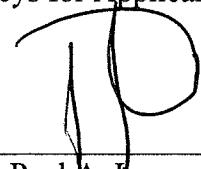
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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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